Work Orde September-23-13				*107	7355*						Page 1	l
	D3913-7		L	Accept	*N900	<u>040</u>	100)* s	etup Stai	*N	S1*	
Revision ID: Item Name:	Rib			_					Sto	^p *N	S2*	
Start Date: Required Date: Reference:	10/01/13 10/02/13	Start Qty: 4.00 Req'd Qty: 4.00	*4*(0	NX)	Cust Item I Customer:	D:					,	
Annrovals:	Process Pla	an:MLJ	Date: 13-09-25	Tooling:	Da	ate:		R	tun Sta	rt *N	R1*	
	QC:			SPC (Y/N):		ate:			Sto	*N	R2*	
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
Draw Nbr	Re	vision Nbr										
D3913	ć											
100				0.00				/3				
100 Large Fab		Memo		0.00			(10x	CC	13-1	2-18	
Large Fab			as per dwg D3913 dentification marks and debu	ırr		a ^r						
110		QC6- Inspect dimension	s to drawing	0.00		10		DAS				
*11 0 *		Memo		0.00		10)	۲	43		13-12	1-18	-

120

120 Packaging

Quality Control

Identify as per dwg & Stock Location:_____

0.00

0.00

Packaging

Memo

										DQA:	Date:	
NCR: Ye	es / No				WORK ORDER NON-C	CON	NFORM	MANCE / UP	DATE			
									1711	QA Closed:	Date:	
Work Order	··				DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
WOIK OIGE	•				Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part No	o.				Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is	1		oforming	Finishing	•	e/Packaging	Other
NCR No	o				Work Order Update]		Large Fab	Composite		Supplier	
	T		r							T		
Root					ption of work order update	1	nitial		tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data	_											
quip/Tooling	_											
Operator	_											
Material	_		Ì									
Setup												
Other		ļ	Ì									
Process												
Supplier		ļ										
Training		Ì		1								
Unapproved						1						<u> </u>
					F	AUL	T CATE	GORY				
Landin	g Gear				General	_	_		_	-	_	-
	Bending				Bend		Grain			Ovalized	<u></u>	Pressure/Forced
	Centre N	ot Conce	ntric to	0/§ွ် 🏗 📘	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped			Burrs		Instruct	ions Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
Γ	Cuffs				Contamination		Mainte	nance		Part Moved		
Γ	Heat Treat				Countersink		Mislabe	led		Positioned \	Vrong	_
ľ	Heat Treat Inspection Strip in Tube				Cut Too Short		Misread	1	Power Loss/Surge Other			

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Work Orde September-23-13				*107				· <u>· · · · · · · · · · · · · · · · · · </u>	Page 2			
Item ID: Revision ID: Item Name:	D3913-7			Accept	*N900	<u>040</u>	100)* s	etup	Start Stop	171	S1* S2*
Start Date: Required Date: Reference:	10/01/13 10/02/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item II Customer:) :		_		S4 4		
Approvals: Process Plan: QC:		an:	Date:	Tooling: SPC (Y/N):	Date:			ŀ	Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II 130 *130* QC Quality Control	D	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number <u>/3//2</u> ,	Insp. Stamp

pl13-12-18

											DQA:	Dat	e: _	
NCR: Y	es / No				WORK ORDER NON-C	ONF	ORN	MANCE / UPE	DATE		QA Closed:	Dat	<u>. </u>	
					<u> </u>						QA Closed.	Dat	е.	
Work Orde	, ř.				DISPOSITION				AGAINST	DE	PARTMENT	PROCESS		
Work Orac					Rework]	:	Skid-tube	Crosstube			Water Jet		Engineering
Part N	lo				Scrap			/lachining	Small Fab	_	ł.	d. Eng. Coor.	_	Quality
					Use-as-is	⊤		oforming	Finishing	-	Rec/Stor	e/Packaging	_	Other
NCR N	lo				Work Order Update]		Large Fab	Composite	<u> </u>		Supplier		
Root				Descri	ption of work order update	Init	ial	Act	ion		Sign &			
Cause	Date	Step	Qty	(or Non-conformance	Chief	Eng	Descr	iption		Date	Verification	Ц.	QC Inspector
Doc/Data														
Equip/Tooling							i						1	
Operator													ŀ	
Material						}	- 1							
Setup						1								
Other		1												
Process													İ	
Supplier														
Training														
Unapproved														
					F.	AULT (CATE	GORY						
Landir	ng Gear				General						-	-		
. [Bending				Bend	∐ Gr	rain				Ovalized		f	Pressure/Forced
	Centre Not Concentric to O/S				BOM/Route	Ha	ardwa	re		L	Over/Under	tolerance	1	Temperature/Cure
	Cracks				Broken/Damaged	lins	specti	on Incomplete			Part Incorred	it [\	Weld
	Crushed/Crimped				Burrs	In:	structi	ions Incomplete/L	Inclear		Part Lost/Mi	ssing	\	Wrong Stock Pulled
	Cuffs				Contamination	Шм	lainte	nance			Part Moved			
	Heat Trea	at			Countersink	М	islabe	led			Positioned V	Vrong _		
	Inspection	n Strip in	Tube		Cut Too Short	М	isread	l			Power Loss/	Surge [Other
	Ripples in Bend				Drill Holes	Offset								

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

September-23-13 11:48:55 AM

Work Order ID:

107355

Parent Item:

D3913-7

Parent Item Name:

Rib

Start Date: 10/01/13

Required Date: 10/02/13

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP Rev:A new issue DD 10.03.19 verified by:EC

DD verf:EC

IPP Rev:B 11.01.17 chg qc5 to 6

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TS0.500W.049 Square Tubing		Purchased	No			100	f	1,736.4301	1.594	6.7115788	10	13-1	2-18

Location	Loc Qty	Loc Code	
WA006	1736.430127		<u></u>
118460	0.00001534		
122938	0.266142		
123 <u>56</u> 5	0.005816		
125062	556.78		(///
125502	246.32156		
M126080	290.056594		
M126581	643		

										DQA:	Date	:		
NCR: Y	es/	/ No				WORK ORDER NON-C	ONFOR	RMANCE / UP	PDATE	QA Closed:	Date	:		
Work Orde	er:					DISPOSITION			AGAINST DE					
Part N	- No					Scrap Machining Small Fab Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			Finishing	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other		
Root					Descri	ption of work order update	Initial	Ac	ction	Sign &				
Cause	ļ	Date	Step	Qty	C	or Non-conformance	Chief En	g Des	cription	Date	Verification	QC Inspector		
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved														
							AULT CAT	EGORY						
Landii	Landing Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped			o/s	General Bend BOM/Route Broken/Damaged Burrs	Hardy Inspe Instru	Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear		Ovalized Over/Under Part Incorre Part Lost/M	ct issing	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled			
	Cuffs Heat Treat Inspection Strip in Tube				Contamination Countersink Cut Too Short	Maintenance Mislabeled Misread		Part Moved Positioned \ Power Loss/	Wrong	Other				
	Ripples in Bend					Drill Holes	Offse	t						

Out of Calibration

Out of Sequence

Outside Dimensions

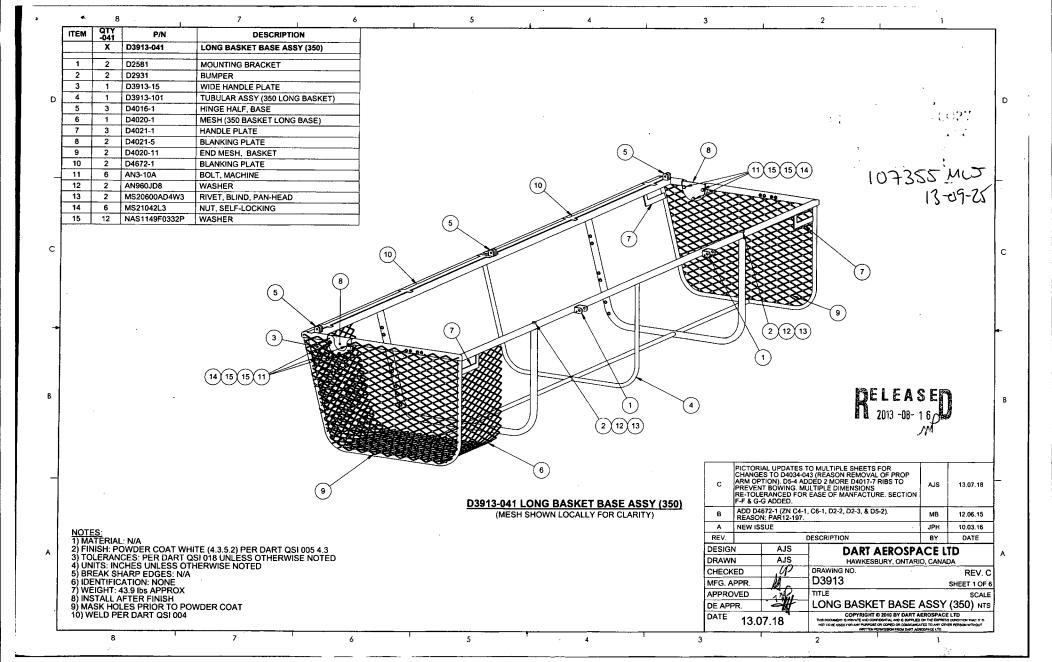
Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish



										DQA:	Date:	
NCR: Y	es / No)			WORK ORDER NON-C		NFORM	MANCE / UPI	DATE			
										QA Closed:	Date	•
Work Orde	s riv				DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part N	lo				Rework Scrap Use-as-is		f Therm	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	NO	· · · · · · · · · · · · · · · · · · ·			Work Order Update	J		Large Fab	Composite	l	Supplier	
Root		<u> </u>		Descri	ption of work order update		nitial	Act	tion	Sign &		
Cause	Date	Step	Qty	•	or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling										<u> </u>		
Operator												
Material							1				i	
Setup			1									
Other												
Process												
Supplier												
Training		1										
Unapproved												
					F	AUL	T CATE	GORY				
Landi	ng Gear				General		_			-		 -
	Bending Bend						Grain			Ovalized		Pressure/Forced
	Centre	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure		
	 -				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	ct _	Weld
	Crushed/Crimped			Burrs		Instruct	ions Incomplete/I	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled	
				Contamination		Mainte	enance		Part Moved			
	Heat Treat Countersink				Countersink	Mislabeled				Positioned V	Vrong	_
	Inspection Strip in Tube Cut Too Short				Cut Too Short	Misread Power Loss/Surge Other					Other	
	Ripple	s in Bend		Drill Holes		Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

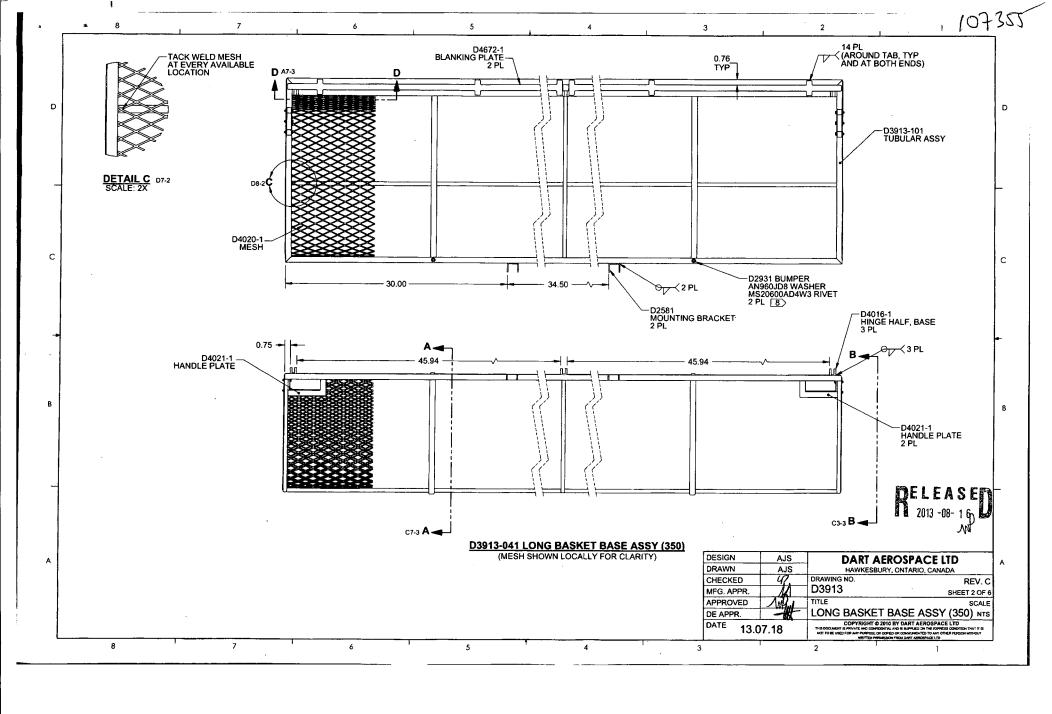
Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

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					•					DQA:	Date	e:
NCR:	es / No				WORK ORDER NON-O	100	NFORN	NANCE / UP	DATE			
									· · · · · · · · · · · · · · · · · ·	QA Closed:	Date	e:
Work Orde	or.				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Orac					Rework	1		Skid-tube	Crosstube]	Water Jet	Engineering
Part N	lo				Scrap		ľ	/lachining	Small Fab	4	d. Eng. Coor.	Quality
					Use-as-is			oforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	lo				Work Order Update]		Large Fab	Composite	j	Supplier	
Root				Descri	ption of work order update		nitial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling										,		
Operator							ļ					
Material												
Setup		}				l						
Other												
Process												
Supplier												
Training												
Unapproved												
					<u> </u>	AUL	T CATE	GORY	<u> </u>			
Landi	ng Gear				General	_			-	-	-	
	Bending			<u> </u>	Bend		Grain			Ovalized	Ļ	Pressure/Forced
	Centre Not Concentric to O/S BOM/Route						Hardwa	re		Over/Under	tolerance	Temperature/Cure
					Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
Crushed/Crimped Burrs				Burrs	L	4	ions Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled	
	Cuffs			Contamination		Mainte	nance		Part Moved			
	Heat Treat Countersink				Countersink	Mislabeled			Positioned V	Vrong _	<u></u>	
	Inspection Strip in Tube Cut Too Short				Cut Too Short	Misread Power Loss/Surge Other				Other		
	Rinnles in Bend Drill Holes Offset							_	_			

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

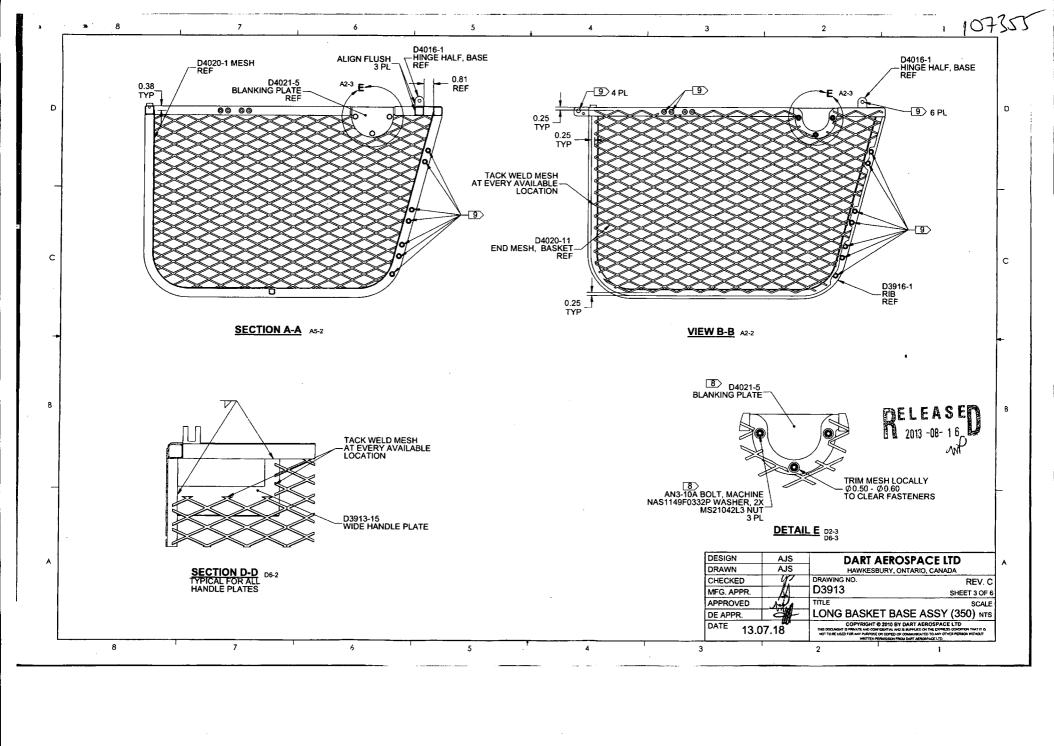
Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

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NCR:	·												
											QA Closed:	Dat	te:
Work Orde	er: _					DISPOSITION				_	EPARTMENT	•	
Part N	-					Scrap Machining Small Fab Use-as-is Thermoforming Finishing			Crosstube Small Fab Finishing Composite	-	Water Jet d. Eng. Coor. re/Packaging Supplier	Quality Other	
Root					Descri	ption of work order update	1	Initial	Act	ion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Descr	iption	Date	Verification	n QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved						F	AUI	LT CATE	GORY				
Landi	ng G	iear				General							
	Landing Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend			Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset			Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other		
	Torque Waves in Extrusion					Drawing	Out of Calibration						

Out of Sequence

Outside Dimensions

DQA:

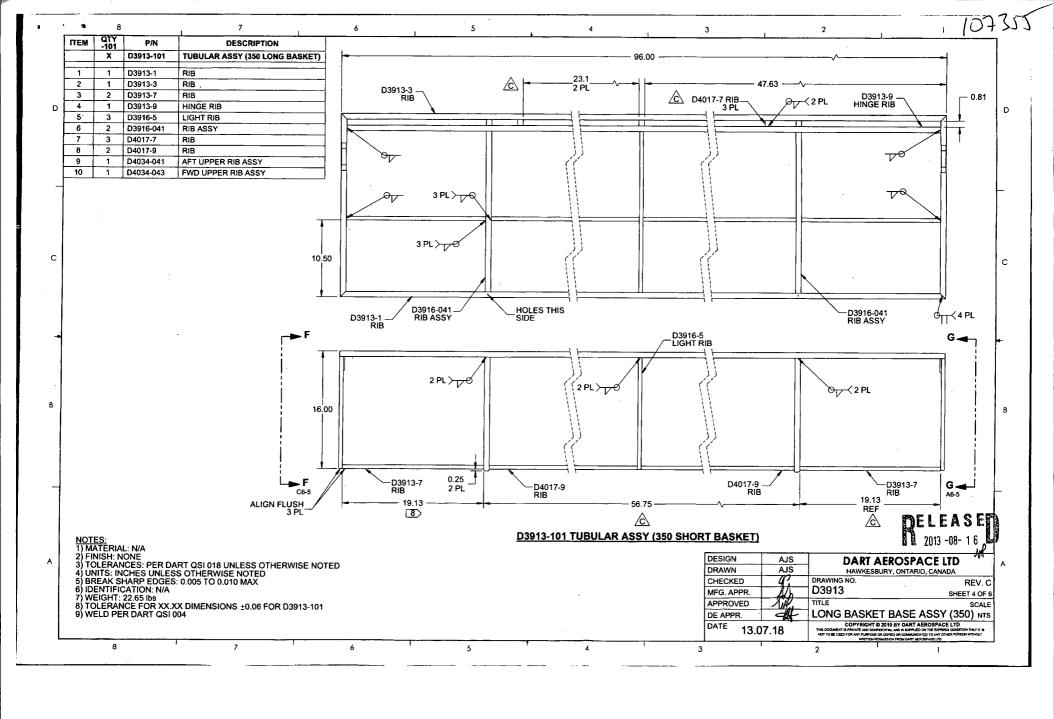
Date:

Turning Sequence

Wave/Twist in Tube

Finish

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									DQA:	Date:	*		
NCR: Y	res / No				WORK ORDER NON-C	CONFOR	MANCE / UP	DATE	QA Closed:	Date:			
		-			DISPOSITION			AGAINST DE					
Work Orde	er:					,		_	. ,		· —		
Part N	No				Rework Scrap	4 1	Skid-tube Machining	Crosstube Small Fab	4	Water Jet d. Eng. Coor.	Engineering Quality		
NCR N	No				Use-as-is Work Order Update	Inerr	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other		
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &	!			
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector		
Doc/Data													
Equip/Tooling													
Operator										ļ			
Material													
Setup													
Other													
Process							Į						
Supplier							·						
Training		1											
Unapproved													
					F	AULT CATE	GORY						
Landi	ng Gear				General				_		_		
	Bending				Bend	Grain			Ovalized		Pressure/Forced		
	Centre Not Concentric to O/S			o/s	BOM/Route	Hardwa	are		Over/Under	tolerance	Temperature/Cure		
	Cracks				Broken/Damaged	Inspect	ion Incomplete		Part Incorre	ct	Weld		
	Crushed/Crimped			Burrs	Instruc	tions Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled			
	Cuffs				Contamination	Mainte	enance		Part Moved	_			
	Heat Treat				Countersink	Mislab	eled		Positioned V	V rong	_		
:	Inspecti	on Strip in	Tube		Cut Too Short	Misrea	d		Power Loss/Surge Other				

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

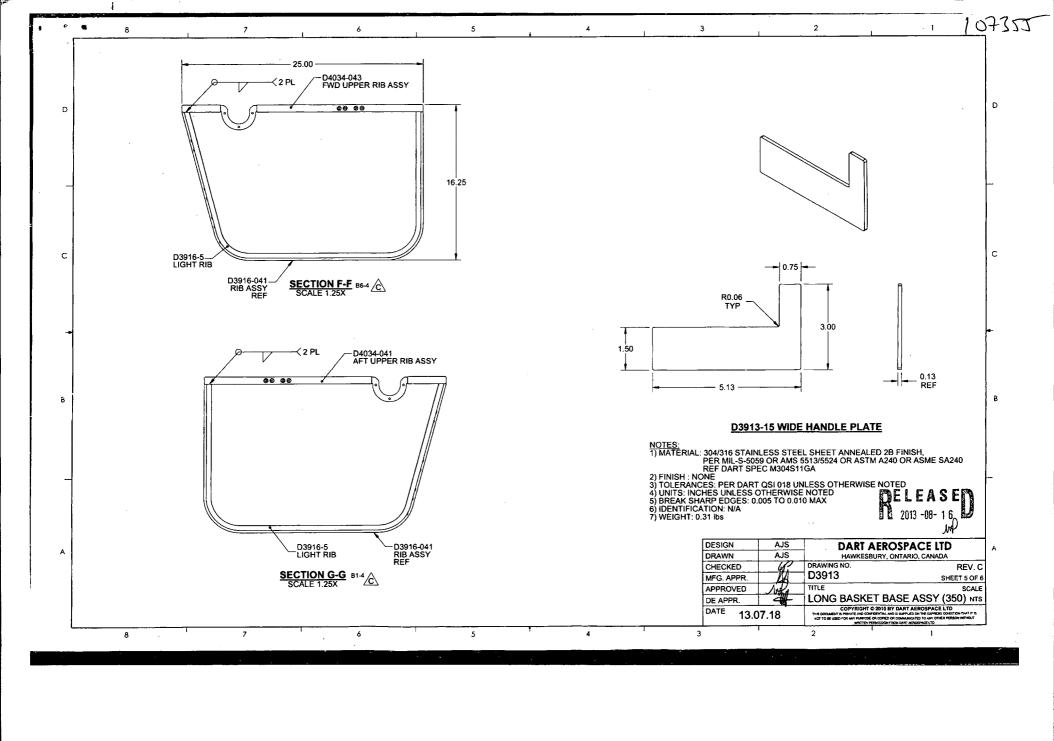
Torque Waves in Extrusion

Drill Holes

Drawing

Finish

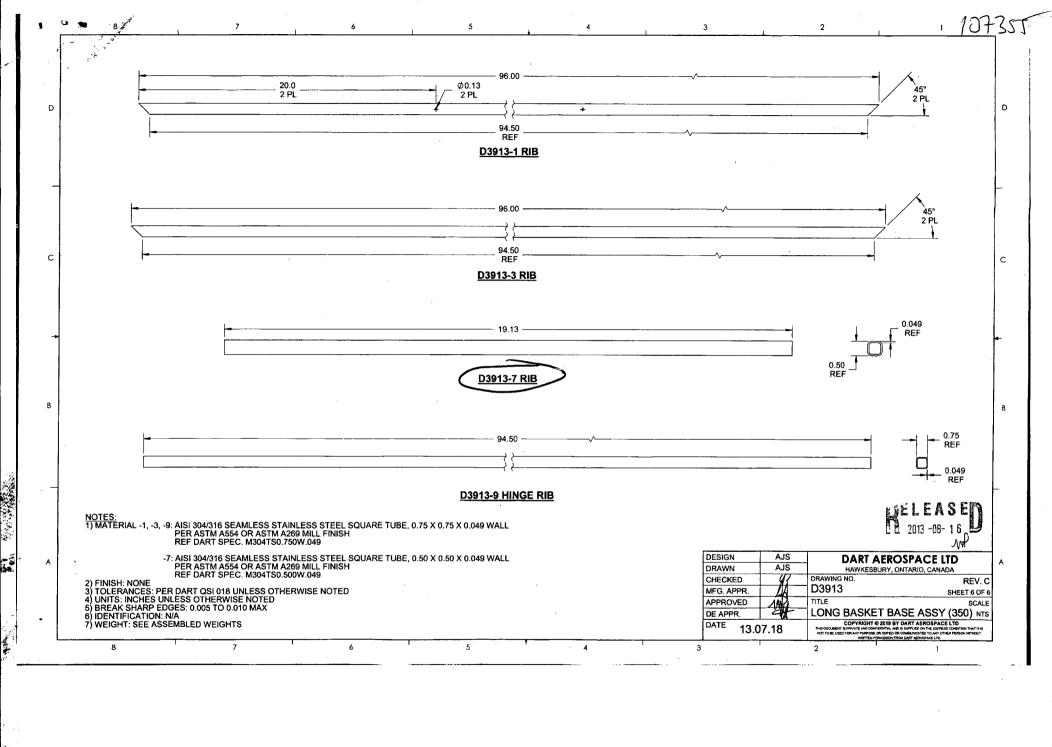
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		DQA:	Date:	
NCR: Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE			
		OA Classel.	Data	

												QA Closea:	Da	ite:		
Work Order:						DISPOSITION		AGAINST DEPA				PARTMENT	PARTMENT/PROCESS			
Part No. NCR No.						Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite				Water Jet Eng Prod. Eng. Coor. Rec/Store/Packaging Supplier			Engineering Quality Other	
Root					Descri	ption of work order update	Ti	nitial	A	ction		Sign &				
Cause		Date	Step	Qty	(or Non-conformance		nief Eng Description			Date	Verificatio	n	QC Inspector		
Doc/Data						,										
Equip/Tooling							1									
Operator																
Material									1							
Setup																
Other	Ш															
Process																
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Landing Gear General										1						
	Ш	Bending				Bend		Grain			<u>—</u>	Ovalized			Pressure/Forced	
	Ш	Centre Not Concentric to O/S			o/s _	BOM/Route		Hardware			<u> </u>	Over/Under		L	Temperature/Cure	
		Cracks				Broken/Damaged	\vdash	Inspection Incomplete			—	Part Incorre		-	Weld	
[Crushed/	Crimped		ļ	Burrs	\vdash	Instructions Incomplete/Unclear			\vdash	Part Lost/M	issing		Wrong Stock Pulled	
	-	Cuffs				Contamination	-	Maintenance			\vdash	Part Moved				
	ldash	Heat Trea			<u> </u>	Countersink	\vdash	Mislabeled			<u> </u>	Positioned Wrong			1	
	$\vdash\vdash$	Inspection		fube	<u> </u>	Cut Too Short	_	Misread				Power Loss/	Surge		Other	
	\vdash	Ripples in		·	_ 	Drill Holes	\vdash	Offset								
	\vdash	Torque Waves in Extrusion				Drawing	\vdash	4	Calibration							
	\vdash	Turning Sequence				Finish	-	1	Sequence							
1	1	Wave/Twist in Tube				Folio		TOUTSIDE	Dimensions							

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Date:

DQA:

NCR:	Yes	/	No
14011.	103	,	110

WORK ORDER NON-CONFORMANCE / UPDATE

NCR: Y	es / No				WORK ORDER NOIN-	CONTOR	CIVIAINCE / OF	DATE	QA Closed:	Date:				
Mork Ordo	<u>.</u>				DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Work Orde Part N					Rework Scrap]	Skid-tube Crosstube Machining Small Fab			Water Jet	Engineering Quality			
NCR N	lo				Use-as-is Work Order Update	The	rmoforming Large Fab	Finishing Composite	Rec/Store/Packaging Other Supplier					
Root	_				•		nitial Action		Sign &					
Cause	Date	Step	Qty		or Non-conformance	Chief En	g Des	cription	Date	Verification	QC Inspector			
Doc/Data Equip/Tooling Operator					·				į					
Material														
Setup		ļ												
Other [1					٠							
rocess						ļ								
Supplier														
Training														
Jnapproved														
					F	AULT CAT	EGORY							
Landin	ng Gear				General				Ovalized	·	, -			
	Bending				Bend	Grain	Grain				Pressure/Forced			
1	Centre No	ot Conce	ntric to (D/S	BOM/Route	Hardy	Hardware			tolerance	Temperature/Cure			
	Cracks				Broken/Damaged	Inspe	ction Incomplete		Part Incorre	ct	Weld			
ļ	Crushed/	Crimped		<u> </u>	Burrs	-	ctions Incomplete	/Unclear	Part Lost/M		Wrong Stock Pulled			
	Cuffs			ļ 	Contamination		tenance		Part Moved					
ļ	Heat Trea	at		<u> </u>	Countersink	Misla	beled		Positioned Wrong					
1	Inspectio	-	Tube	<u> </u>	Cut Too Short	Misre			Power Loss/	/Surge	Other			
]	Ripples in				Drill Holes	Offse					·			
	Torque V			՝ _	Drawing	├ ──	f Calibration							
	Turning Sequence				Finish	Out o	f Sequence							
	Wave/Twist in Tube				Folio	Outsi	Outside Dimensions							